

## ABSTRACT OF DISCLOSURE

New and improved A scanning device and corresponding method that include and involve  
includes a movable stage on which a specimen is positioned, irradiation means which  
irradiates an an irradiating device for electron beam onto an irradiation region of the  
specimen, secondary beam detection means used in a detection device for generating a picture  
of the irradiation region by detecting a secondary beam which consists of at least one of  
including secondary electrons or reflected electrons from the irradiation region of the electron  
beam region, and an imaging electron optical system which causes imaging of for imaging the  
secondary beam on a detection surface of the secondary beam detection means, and which is  
arranged between the specimen and the secondary beam detection means surface. The A  
secondary beam detection means is equipped with detector including a fluorescent unit which  
is arranged on the detection surface, and which converts surface to convert the secondary  
beam into light, and one-dimensional line sensors which have a structure arrayed in two  
dimensions for forming electric charge by photoelectric conversion, an array imaging element  
which continuously adds up for accumulating the electric charge of the accumulated image in  
a predetermined line of the line sensors, and the electric charge of the line of the image which  
moves accompanying the movement of the stage, and a two-dimensional imaging element  
which emits electric charge by means of photoelectric conversion. A corresponding method  
is also disclosed. The scanning device and corresponding method further include and involve  
changover means for selectively irradiating the light converted by means of the fluorescent  
unit to an imaging element which is either one of the array imaging elements and the two-  
dimensional imaging element.